

# **METHOD AND APPARATUS FOR THE PRE-HEATING OF A VAPORIZATION CHAMBER**

## **ABSTRACT OF THE DISCLOSURE**

The present invention is generally directed toward an apparatus and method for the heating of vaporized aqueous mixture, more specifically toward the pre-heating a vaporization chamber. In a power plant utilizing a cleaning process, such as a selective catalytic reduction (SCR) process, or other type of process, to remove harmful components, such as nitrous oxide ( $\text{NO}_x$ ), from a stream of flue gas wherein the cleaning process includes the injection of vaporized aqueous mixture into the stream of flue gas, the present invention comprises a vaporizing chamber having a heat source to facilitate the heating and subsequent vaporization of the ammonia.